IN THE CLAIMS:

Please cancel Claims 5, 6, 14, 15, 17, 23, 24, and 26 without prejudice.

Please amend the claims as follows:

Claim 2, line 1, delete "1" and insert --28-- therefor.

Claim 7, line 1, delete "1" and insert --28-- therefor.

Claim 8, line 1, delete "1" and insert --28-- therefor.

Claim 10, line 1, delete "9" and insert --30-- therefor.

Claim 16, line 1, delete "9" and insert --30-- therefor.

Claim 18, line 1, delete "17" and insert --32-- therefor.

Claim 20, line 1, delete "19" and insert --33-- therefor.

Claim 21, line 1, delete "19" and insert --33-- therefor.

Claim 25, line 1, delete "19" and insert --33-- therefor.

Claim 27, line 1, delete "26" and insert --35-- therefor.

Please add the following claims:

~~28~~ 41. (Claim 5 rewritten) In an implanter apparatus for implanting a pellet in an animal through a needle by movement of an elongated impeller from a retracted position within an implanter housing to an extended position through said needle by pivoting a trigger from an armed position to a release position, the improvement comprising:

(a) a slide member slidably mounted on said housing, engaged with said trigger and said impeller, and operative to retract said impeller to said retracted position and extend said trigger to said armed position upon manual reciprocation of said slide member; and

(b) a trigger cable operatively engaged between said trigger and said impeller and advancing said impeller from said retracted position toward said extended position upon pivoting said trigger.

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29. (Claim 6 rewritten) In an implanter apparatus for implanting a pellet in an animal through a needle by movement of an elongated impeller from a retracted position within an implanter housing to an extended position through said needle by pivoting a trigger from an armed position to a release position, the improvement comprising:

(a) a slide member slidably mounted on said housing, engaged with said trigger and said impeller, and operative to retract said impeller to said retracted position and extend said trigger to said armed position upon manual reciprocation of said slide member; and

(b) a retractor cable operatively engaged between said slide member and said impeller and urging said impeller toward said retracted position upon reciprocation of said slide member.

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30. (Claim 14 rewritten) In an implanter apparatus for subcutaneously implanting a pellet in an animal through a needle by movement of an elongated impeller from a retracted position within an implanter housing to an extended position through said needle upon pivoting a trigger from an armed position to a release position, the improvement comprising:

(a) an impeller spring operatively engaged between said impeller and said housing and operable to resiliently urge said impeller toward said extended position when a spring force stored in said spring is released;

(b) a latch mechanism positioned within said housing to releasably retain a spring force in said spring;

(c) a slide mechanism slidably mounted on said housing and engaged with said trigger and said impeller in such a manner as to position said trigger in said armed position and said impeller in said retracted position and to store a spring force in said spring upon manual reciprocation of said slide mechanism; and

(d) a release member connected to said trigger and operative upon movement of said trigger toward said release position to urge said impeller toward said extended position thereby releasing said impeller from said latch mechanism to enable said spring to

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resiliently urge said impeller toward said extended position, said release member including a trigger cable operatively engaged between said trigger and said impeller and advancing said impeller from said retracted position toward said extended position upon pivoting said trigger.

a1 cont.

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17 31. (Claim 15 rewritten) In an implanter apparatus for subcutaneously implanting a pellet in an animal through a needle by movement of an elongated impeller from a retracted position within an implanter housing to an extended position through said needle upon pivoting a trigger from an armed position to a release position, the improvement comprising:

a' cont.

(a) an impeller spring operatively engaged between said impeller and said housing and operable to resiliently urge said impeller toward said extended position when a spring force stored in said spring is released;

(b) a latch mechanism positioned within said housing to releasably retain a spring force in said spring;

(c) a slide mechanism slidably mounted on said housing and engaged with said trigger and said impeller in such a manner as to position said trigger in said armed position and said impeller in said retracted position and to store a spring force in said spring upon manual reciprocation of said slide mechanism;

(d) a release member connected to said trigger and operative upon movement of said trigger toward said release position to urge said impeller toward said extended position thereby releasing said impeller from said latch mechanism to enable said spring to

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resiliently urge said impeller toward said extended position; and

(e) a retractor cable operatively engaged between said slide member and said impeller and urging said impeller toward said retracted position upon reciprocation of said slide member.

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18 ~~32~~. (Claim 17 rewritten) In an implanter apparatus for subcutaneously implanting a pellet in an animal through a needle by movement of an elongated impeller from a retracted position within an implanter housing to an extended position through said needle upon pivoting a trigger from an armed position to a release position, the improvement comprising:

A' cont.

(a) an impeller spring operatively engaged between said impeller and said housing and operable to resiliently urge said impeller toward said extended position when a spring force stored in said spring is released;

(b) a latch mechanism positioned within said housing to releasably retain a spring force in said spring;

(c) a slide mechanism slidably mounted on said housing and engaged with said trigger and said impeller in such a manner as to position said trigger in said armed position and said impeller in said retracted position and to store a spring force in said spring upon manual reciprocation of said slide mechanism;

(d) a release member connected to said trigger and operative upon movement of said trigger toward said release position to urge said impeller toward said extended position thereby releasing said impeller from said latch mechanism to enable said spring to

resiliently urge said impeller toward said extended position;

(e) said housing having a front needle end with said needle mounted thereon and an opposite back end;

(f) an elongated release shuttle slidably mounted within said housing, said shuttle having a front end longitudinally spaced from a rear end and having a release cam positioned at said front end;

a' cont.

(g) an impeller carrier slidably mounted within said housing between said front end and said rear end of said shuttle, said impeller having a proximal end connected to said carrier and extending through said front end of said shuttle;

(h) an impeller retractor cable connected between said housing and said impeller carrier and passing about said rear end of said shuttle in such a manner that rearward movement of said shuttle toward said back end of said housing causes rearward movement of said impeller carrier;

(i) said latch mechanism including a spring carrier slidably mounted within said housing and having a latch pawl positioned at a front pawl end of said spring carrier, said spring carrier having a rear anchor end opposite said pawl end;

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(j) said impeller spring being connected between said housing and said spring carrier and resiliently urging said spring carrier rearward;

(k) an impeller extender cable connected between said impeller carrier and said spring carrier and passing about said front end of said shuttle in such a manner that rearward movement of said spring carrier when said shuttle is in a forward position causes forward movement of said impeller carrier;

(l) said slide mechanism including an internal slide bracket slidably mounted within said housing, including a shuttle retractor positioned forward of said front end of said shuttle, having said impeller extending therethrough, and having a latch shoulder positioned in such a manner that rearward movement of said slide bracket urges said shuttle rearward to a position at which said spring carrier pawl engages said latch shoulder and forward movement of said slide bracket urges said spring carrier forward thereby storing a spring force in said impeller spring; and

(m) a trigger cable connected between said shuttle and said trigger in such a manner that rearward movement of said shuttle pivots said trigger toward said armed position and movement of said trigger toward said release

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position draws said shuttle and said impeller carrier forward to a position at which said release cam engages and releases said pawl from said latch shoulder thereby releasing said spring carrier to move rearwardly and resiliently urging said impeller toward said extended position by way of said extender cable.

Amend.

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20 ~~38~~. (Claim 23 rewritten) An implanter apparatus for subcutaneously implanting a pellet in an animal and comprising:

(a) an implanter housing having a front end and a rear end;

(b) a manual grip extending from said housing;

(c) a tubular needle mounted on said front end of said housing and having a sharpened end for puncturing skin of an animal to enable implanting a pellet therethrough;

a1 cont.

(d) a pellet magazine holding a plurality of pellets sized to be implanted through said needle and positioned relative to said housing to selectively align a pellet with said needle;

(e) an elongated impeller mounted in said housing to enable reciprocating movement between an extended position through said needle and a retracted position within said housing, said impeller being aligned with said needle to enable travel of a distal end of said impeller through said magazine to urge an aligned pellet through said needle;

(f) an impeller spring operatively engaged between said impeller and said housing and operable to resiliently urge said impeller toward said extended position when a spring force stored in said spring is released;

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(g) a latch mechanism positioned within said housing to releasably retain a spring force in said spring;

(h) a trigger pivotally connected to said housing to enable movement between an extended armed position and a release position toward said grip;

(i) a slide mechanism slidably mounted on said rear end of said housing and engaged with said trigger and said impeller in such a manner as to extend said trigger to said armed position, to move said impeller to said retracted position, and to store a spring force in said spring upon manual reciprocation of said slide mechanism;

(j) a release mechanism operatively connected between said trigger and said latch mechanism and operative upon movement of said trigger toward said release position to urge said impeller toward said extended position past said latch mechanism to thereby release said impeller spring and enable said impeller spring to urge said impeller toward said extended position; and

(k) a trigger cable operatively engaged between said trigger and said impeller and advancing said impeller from said retracted position toward said extended position upon pivoting said trigger.

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25 34. (Claim 24 rewritten) An implanter apparatus for subcutaneously implanting a pellet in an animal and comprising:

(a) an implanter housing having a front end and a rear end;

(b) a manual grip extending from said housing;

(c) a tubular needle mounted on said front end of said housing and having a sharpened end for puncturing skin of an animal to enable implanting a pellet therethrough;

(d) a pellet magazine holding a plurality of pellets sized to be implanted through said needle and positioned relative to said housing to selectively align a pellet with said needle;

(e) an elongated impeller mounted in said housing to enable reciprocating movement between an extended position through said needle and a retracted position within said housing, said impeller being aligned with said needle to enable travel of a distal end of said impeller through said magazine to urge an aligned pellet through said needle;

(f) an impeller spring operatively engaged between said impeller and said housing and operable to resiliently urge said impeller toward said extended position when a spring force stored in said spring is released;

(g) a latch mechanism positioned within said housing to releasably retain a spring force in said spring;

(h) a trigger pivotally connected to said housing to enable movement between an extended armed position and a release position toward said grip;

(i) a slide mechanism slidably mounted on said rear end of said housing and engaged with said trigger and said impeller in such a manner as to extend said trigger to said armed position, to move said impeller to said retracted position, and to store a spring force in said spring upon manual reciprocation of said slide mechanism;

(j) a release mechanism operatively connected between said trigger and said latch mechanism and operative upon movement of said trigger toward said release position to urge said impeller toward said extended position past said latch mechanism to thereby release said impeller spring and enable said impeller spring to urge said impeller toward said extended position; and

(k) a retractor cable operatively engaged between said slide member and said impeller and urging said impeller toward said retracted position upon reciprocation of said slide member.

26 35. (Claim 26 rewritten) An implanter apparatus for subcutaneously implanting a pellet in an animal and comprising:

(a) an implanter housing having a front end and a rear end;

(b) a manual grip extending from said housing;

(c) a tubular needle mounted on said front end of said housing and having a sharpened end for puncturing skin of an animal to enable implanting a pellet therethrough;

a1 cont. (d) a pellet magazine holding a plurality of pellets sized to be implanted through said needle and positioned relative to said housing to selectively align a pellet with said needle;

(e) an elongated impeller mounted in said housing to enable reciprocating movement between an extended position through said needle and a retracted position within said housing, said impeller being aligned with said needle to enable travel of a distal end of said impeller through said magazine to urge an aligned pellet through said needle;

(f) an impeller spring operatively engaged between said impeller and said housing and operable to resiliently urge said impeller toward said extended position when a spring force stored in said spring is released;

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(g) a latch mechanism positioned within said housing to releasably retain a spring force in said spring;

(h) a trigger pivotally connected to said housing to enable movement between an extended armed position and a release position toward said grip;

(i) a slide mechanism slidably mounted on said rear end of said housing and engaged with said trigger and said impeller in such a manner as to extend said trigger to said armed position, to move said impeller to said retracted position, and to store a spring force in said spring upon manual reciprocation of said slide mechanism;

(j) a release mechanism operatively connected between said trigger and said latch mechanism and operative upon movement of said trigger toward said release position to urge said impeller toward said extended position past said latch mechanism to thereby release said impeller spring and enable said impeller spring to urge said impeller toward said extended position;

(k) an elongated release shuttle slidably mounted within said housing, said shuttle having a front end longitudinally spaced from a rear end and having a release cam positioned at said front end;

(l) an impeller carrier slidably mounted within said

housing between said front end and said rear end of said shuttle, said impeller having a proximal end connected to said carrier and extending through said front end of said shuttle;

(m) an impeller retractor cable connected between said housing and said impeller carrier and passing about said rear end of said shuttle in such a manner that rearward movement of said shuttle toward said back end of said housing causes rearward movement of said impeller carrier;

(n) said latch mechanism including a spring carrier slidably mounted within said housing and having a latch pawl positioned at a front pawl end of said spring carrier, said spring carrier having a rear anchor end opposite said pawl end;

(o) said impeller spring being connected between said housing and said spring carrier and resiliently urging said spring carrier rearward;

(p) an impeller extender cable connected between said impeller carrier and said spring carrier and passing about said front end of said shuttle in such a manner that rearward movement of said spring carrier when said shuttle is in a forward position causes forward movement of said impeller carrier;

(q) said slide mechanism including an internal slide bracket slidably mounted within said housing, including a shuttle retractor positioned forward of said front end of said shuttle, having said impeller extending therethrough, and having a latch shoulder positioned in such a manner that rearward movement of said slide bracket urges said shuttle rearward to a position at which said spring carrier pawl engages said latch shoulder and forward movement of said slide bracket urges said spring carrier forward thereby storing a spring force in said impeller spring; and

(r) a trigger cable connected between said shuttle and said trigger in such a manner that rearward movement of said shuttle pivots said trigger toward said armed position and movement of said trigger toward said release position draws said shuttle and said impeller carrier forward to a position at which said release cam engages and releases said pawl from said latch shoulder thereby releasing said spring carrier to move rearwardly and resiliently urging said impeller toward said extended position by way of said extender cable.